

Remarks:

Reconsideration of the application is requested.

Claims 1-22 remain in the application. Claims 1-4, 6-12, 15, 18-20, and 22 has been amended.

In item 2 on page 2 of the above-identified Office action, claims 1-22 have been rejected as being indefinite under 35 U.S.C. § 112, first paragraph. More specifically, the Examiner has stated that "'Fiber-type' is considered indefinite because the addition of the word 'type' to an otherwise definite expression extends the scope of the expression so as to render it indefinite." The Examiner's comments have been noted and the word "'Fiber-type" has been deleted from the claims. More specifically, the phrase "at least one of fibers and fiber-type materials" has been replaced by "fibrous material".

It is accordingly believed that the claims meet the requirements of 35 U.S.C. § 112, first paragraph. Should the Examiner find any further objectionable items, Counsel would appreciate a telephone call during which the matter may be resolved. The above-noted changes to the claim(s) are provided solely for the purpose of satisfying formal requirements or are made solely for cosmetic reasons to

clarify the claim(s). The changes are neither provided for overcoming the prior art nor do they narrow the scope of the claim(s) for any reason related to the statutory requirements for a patent.

In item 4 on page 2 of the Office action, claims 1, 3, 9-13, 15-16, 18, 20-22 have been rejected as being anticipated by *Trask et al.* (US 4,780,359) under 35 U.S.C. § 102.

In item 6 on page 3 of the Office action, claims 2, 4-8, 14, 17, and 19 have been rejected as being obvious over *Trask et al.* in view of *Murch* (US 3,934,066) under 35 U.S.C. § 103.

The rejections have been noted and claim 1 has been amended in an effort to even more clearly define the invention of the instant application. Support for the changes is found in the second paragraph on page 7 of the specification.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 as amended calls for, inter alia:

a core layer including fibrous material and having at least one outer surface, said fibrous material being provided with a fire retardant additive; and

a covering layer including a foamable material covering said core layer at said at least one outer surface, said **foamable material** being at least difficult to ignite and **foaming** at a given temperature **to insulate said core layer from high temperature and oxygen.**

Trask et al. disclose a textile panel made of various layers of nonwoven textile fibers that have been carded, cross-lapped, needle punched and thermally bonded by heating the panel to the temperature softening point. The fibers are thermoformed and retain a permanent shape due to the thermoplastic properties of the fibers used.

In col. 6, lines 3-12, Trask et al. state:

FIG. 2 illustrates a side view of the embodiment of FIG. 1 after all processing steps have been completed. FIG. 3 illustrates an alternative embodiment of the invention in which the top side intermediate face 18, which will usually be made of a fibrous batt, has been replaced with a top side intermediate face comprised of a **polymer foam material 24**. The alternative embodiment which uses foam beneath the outer skin is better at absorbing impacts and will have a more resilient hand feel.

(emphasis added)

The "polymer foam material 24" of Trask et al. cannot be equated with "foamable material" recited in the claims of the instant application. Clearly, Trask et al. do not show a foamable material foaming at a given temperature to insulate said core layer from high temperature and oxygen, as recited

in claim 1 of the instant application. Therefore, the invention as recited in claim 1 of the instant application is not anticipated by *Trask et al.*.

The inventive concept of the invention of the instant application is to use foamable material which foams up when subjected to heat and thereby insulates a core layer from high temperatures and oxygen. Since the core layer is completely insulated from the exterior by the foaming, the inflammation temperature is not reached and no oxygen needed for combustion can reach the core layer. In this way, an insulation material is produced that provides good insulation properties with its exterior and interior fiber layers and that is difficult or impossible to ignite and virtually eliminates the possibility of producing toxic gases. *Trask et al.* neither suggest nor contain the relevant teaching which would suggest such an insulation material. Therefore, the invention as recited in claim 1 of the instant application is also believed not to be obvious over *Trask et al.*.

It is accordingly believed to be clear that *Trask et al.* do not show the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and because claims 2-22 are ultimately dependent on claim 1, they are believed to be patentable as well.

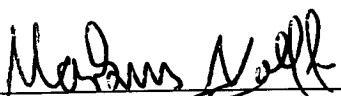
Considering the deficiencies of the primary reference *Trask et al.*, it is believed not to be necessary at this stage to address the secondary reference *Murch*, and whether or not there is sufficient suggestion or motivation with a reasonable expectation of success for modifying or combining the references as required by MPEP § 2143.

In view of the foregoing, reconsideration and allowance of claims 1-22 are solicited.

Petition for extension is herewith made. The extension fee for response within a period of one month pursuant to Section 1.136(a) in the amount of \$ 110.00 in accordance with Section 1.17 is enclosed herewith.

Please charge any other fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,


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Version with markings to show changes made:

Claim 1 (amended). A sound and heat insulation material, comprising:

a core layer including [at least one of fibers and fiber-type materials] fibrous material and having at least one outer surface, said [at least one of said fibers and fiber-type materials] fibrous material being provided with a fire retardant additive; and

a covering layer including a [reactivateable] foamable material [for] covering said core layer at said at least one outer surface, said [reactivateable] foamable material being at least difficult to ignite and [being foamable] foaming at a given temperature to insulate said core layer from high temperature and oxygen.

Claim 2 (amended). The sound and heat insulation material according to claim 1, including at least one further [reactivateable] foamable material, said at least one further [reactivateable] foamable material being foamable at a further given temperature different from said given temperature.

Claim 3 (amended). The sound and heat insulation material according to claim 1, wherein:

said core layer is a heat insulation mat and said fibrous material [including] includes at least one element selected from the group consisting of natural fibers, mineral fibers and synthetic fibers; and

said covering layer includes at least one of a foil and a fiber layer.

Claim 4 (amended). The sound and heat insulation material according to claim 3, wherein said one of said foil and said fiber layer is impregnated with said [reactivateable] foamable material.

Claim 6 (amended). The sound and heat insulation material according to claim 3, wherein said fiber layer is one of a woven fabric and a knit fabric, said fiber layer includes fibers formed of said [reactivateable] foamable material.

Claim 7 (amended). The sound and heat insulation material according to claim 3, wherein said fiber layer is one of a woven fabric and a knit fabric, said fiber layer includes fibers coated with said [reactivateable] foamable material.

Claim 8 (amended). The sound and heat insulation material according to claim 3, wherein said fiber layer is one of a woven fabric and a knit fabric, said fiber layer includes fibers sprayed with said [reactivateable] foamable material.

Claim 9 (amended). The sound and heat insulation material according to claim 1, wherein said covering layer includes at least one [reactivateable] foamable fiber layer having cut, foamable fibers scattered directly onto said core layer, said cut, foamable fibers having a given length and a given cross-sectional diameter.

Claim 10 (amended). The sound and heat insulation material according to claim 1, wherein said covering layer includes at least one [reactivateable] foamable fiber layer having at least one element selected from the group consisting of synthetic material, natural material, renewable material, carbon fibers and glass fibers.

Claim 11 (amended). The sound and heat insulation material according to claim 1, wherein said [reactivateable] foamable material is self-extinguishing, said covering layer includes fibers made from said [reactivateable] foamable material.

Claim 12 (amended). The sound and heat insulation material according to claim 1, wherein said at least one outer surface

includes a first and a second outer surface, said first outer surface covered by a first material layer [reactivateable] foamable at a first temperature, said second outer surface covered by a second material layer [reactivateable] foamable at a second temperature different from said first temperature.

Claim 15 (amended). The sound and heat insulation material according to claim 1, wherein said at least one outer surface includes a given outer surface, said given outer surface is covered by a first material layer [reactivateable] foamable at a first temperature and at least by a second material layer [reactivateable] foamable at a second temperature different from said first temperature.

Claim 18 (amended). The sound and heat insulation material according to claim 1, wherein said core layer has substantial heat and sound insulation properties and said fibrous material includes at least one element selected from the group consisting of synthetic fibers, natural fibers, renewable fibers, glass fibers, mineral fibers and carbon fibers.

Claim 19 (amended). The sound and heat insulation material according to claim 18, wherein said [fibers] fibrous material of said core layer [are] is coated with a [reactive,] further foamable material.

Claim 20 (amended). The sound and heat insulation material according to claim 18, wherein said [fibers] fibrous material of said core layer [include] includes foamable fibers.

Claim 22 (amended). The sound and heat insulation material according to claim 1, wherein said [reactivateable] foamable material is a non-flammable material.